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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,376	12/05/2005	Masamichi Morita	Q86778	6763

23373 7590 10/07/2010

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EXAMINER	
HIGGINS, GERARD T	

ART UNIT	PAPER NUMBER
1785	

NOTIFICATION DATE	DELIVERY MODE
10/07/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 09/21/2010 have been entered and fully considered but they are not persuasive.

Applicants argue in point (i) that the Examiner is treating heptadecafluoro tetrahydro decyltrichlorosilane as a compound that reads on option (d) of applicants' claims.

The Examiner responds again by saying that this is not the case. Ishida and Matsuo et al. both teach heptadecafluoro tetrahydro decyltrichlorosilane. Matsuo et al. *also teaches* at col. 4, lines 10-20 combined with col. 5, line 38 compounds that read on applicants' option (d) and at col. 5, lines 30-33 that read on applicants' option (a). The compounds at col. 4, lines 10-20 combined with col. 5, line 38 that read on applicants' option (d) and at col. 5, lines 30-33 that read on applicants' option (a) are *equivalent* compounds to heptadecafluoro tetrahydro decyltrichlorosilane.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have merely substituted the heptadecafluoro tetrahydro decyltrichlorosilane of Ishida for *any* of the compounds of Matsuo et al. which are known chemical equivalents having antisoiling properties, including the perfluoroisopropyl silanes disclosed, i.e. those at col. 4, lines 10-20 combined with col. 5, line 38 which are compounds that read on applicants' option (d) and at col. 5, lines 30-33 which are compounds that read on applicants' option (a). The results of such a substitution would

have been obvious to one having ordinary skill in the art. The motivation to make the substitution is that all the compounds are known to have low reflectance and good antisoiling properties for optical articles; further, Matsuo et al. recognize that a larger number of carbon atoms in the perfluoroalkyl group is economically unfeasible (col. 4, lines 14-20).

Applicants argue in point (ii) that Matsuo et al. does not disclose compounds with sufficient specificity that read on the presently claimed option (d).

Matsuo et al. disclose at col. 4, lines 10-20 that the number of carbon atoms in the perfluoroalkylene group can have 2 to 12 carbon atom, particularly at least 3. This is sufficient specificity to at least support a perfluoroalkylene group of 2, i.e. ethyl, and 3, i.e. propyl, carbon atoms. The compound at col. 5, line 38 which has a typographical error on the first carbon group should read $CF_3(CF_2)_7C_2H_4OCONH(CH_2)_3Si(OCH_3)_3$. There is sufficient specificity in Matsuo et al. to have made the perfluoroalkyl group of the compound at col. 5, line 38 have 2 or 3 carbon atoms, which is a number of carbons, clearly described with sufficient specificity, that reads on applicants' option (d) as previously stated in the final office action mailed 06/21/2010.

Applicants argue in their point (iii) that the Examiner does not have motivation to use the compounds of Matsuo et al. in the device of Ishida.

First, the compounds set forth above are recognized as equivalents in Matsuo et al. For at least this reason it would have been obvious to one having ordinary skill in the art to have used any of the antisoiling coating compositions of Matsuo et al. as the 1st self-organization thin film of Ishida. Applicants' argument in their point (iii) is related to

applicants' argument in regard to point (i) because they are both drawn to equivalence of chemical compounds.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have merely substituted the heptadecafluoro tetrahydro decyltrichlorosilane of Ishida for *any* of the compounds of Matsuo et al. which are known chemical equivalents having antisoiling properties, including the perfluoroisopropyl silanes disclosed, i.e. those at col. 4, lines 10-20 combined with col. 5, line 38 which are compounds that read on applicants' option (d) and at col. 5, lines 30-33 which are compounds that read on applicants' option (a). The results of such a substitution would have been obvious to one having ordinary skill in the art. The motivation to make the substitution is that all the compounds are known to have low reflectance and good antisoiling properties for optical articles; further, Matsuo et al. recognize that a larger number of carbon atoms in the perfluoroalkyl group is economically unfeasible (col. 4, lines 14-20).

Second, applicants' are reminded that according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an applicants' invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." Matsuo et al. is, therefore, a reasonably pertinent reference, because it

teaches *antisoiling* compositions utilizing fluorine containing compounds, which is a function especially pertinent to the invention at hand as well as that of Ishida.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERARD T. HIGGINS whose telephone number is (571)270-3467. The examiner can normally be reached on M-F 10am-8pm est. (Variable one work-at-home day).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on 571-272-1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Ruthkosky/
Supervisory Patent Examiner, Art Unit 1785

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